

REMARKS

The present application was filed on August 3, 2000 with claims 1-20. Claims 1-20 are currently pending in the application. Claims 1 and 15-20 are the independent claims.

In the Office Action, the Examiner allowed claims 1-16, and rejected claims 17-20 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,597,678 (hereinafter "Kuwahara").

In this response, Applicants respectfully traverse the §103(a) rejection, and amend independent claims 17-20. Applicants request reconsideration of the present application in view of the above amendments and the following remarks.

A proper *prima facie* case of obviousness over a single cited reference requires that the reference must "teach or suggest all the claim limitations." If all limitations are not explicitly met, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference teachings to reach the claimed invention. See Manual of Patent Examining Procedure (MPEP), Eighth Edition, August 2001, §706.02(j).

Applicants submit that the Examiner has failed to establish a proper *prima facie* case of obviousness in the present §103(a) rejection of independent claims 17-20, in that the Kuwahara reference fails to teach or suggest all the claim limitations, and in that no cogent motivation has been identified for modifying the reference teachings to reach the claimed invention.

The Examiner acknowledges that Kuwahara fails to meet the claim limitations regarding the unique hopping sequence. However, the Examiner argues that a modification of Kuwahara to meet the limitations in question would be obvious because "CDMA system[s] based on frequency hopping spread spectrum signals have been widely used in wireless communication applications." See Office Action at page 3, first full paragraph. Applicants respectfully submit that this conclusory statement fails to provide a requisite motivation for modification of the Kuwahara teachings.

The Federal Circuit has stated that when patentability turns on the question of obviousness, the obviousness determination "must be based on objective evidence of record" and that "this precedent has been reinforced in myriad decisions, and cannot be dispensed with." In re Sang-Su Lee, 277 F.3d 1338, 1343 (Fed. Cir. 2002). Moreover, the Federal Circuit has stated that "conclusory statements" by an examiner fail to adequately address the factual question of

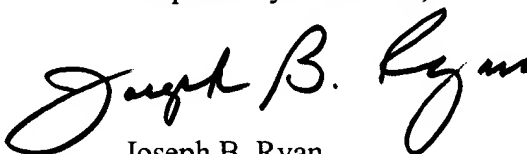
motivation, which is material to patentability and cannot be resolved “on subjective belief and unknown authority.” Id. at 1343-1344. There has been no showing in the present §103(a) rejection of objective evidence of record that would motivate one skilled in the art to modify the Kuwahara teachings to produce the particular limitations of claim 1. The above-quoted statement of obviousness given by the Examiner in the Office Action is precisely the type of subjective, conclusory statement that the Federal Circuit has indicated provides insufficient support for an obviousness rejection.

The §103(a) rejection is therefore believed to be improper, and should be withdrawn.

Notwithstanding the foregoing traversal, Applicants have amended each of independent claims 17-20 to indicate that the unique hopping sequence specifies for the given mobile station a hopping between tones of a plurality of orthogonal frequency division multiplexed (OFDM) tones. Moreover, each of the mobile stations is assigned one or more of the tones for use in conjunction with transmission of a corresponding symbol, with the tone assignments being changed for the mobile stations on a symbol-by-symbol basis. Thus, the unique hopping sequence as recited in claims 17-20 more specifically refers to a symbol-by-symbol hopping between OFDM tone assignments, as in the OFDM-SSMA system described in the specification at, for example, page 6, lines 3-18. This is in contrast to conventional frequency hopping arrangements recited by the Examiner in formulating the §103(a) rejection.

Accordingly, claims 17-20 are believed to be in condition for allowance.

Respectfully submitted,

A handwritten signature in black ink, reading "Joseph B. Ryan". The signature is fluid and cursive, with the first name "Joseph" and last name "Ryan" clearly legible.

Date: September 28, 2004

Joseph B. Ryan
Attorney for Applicant(s)
Reg. No. 37,922
Ryan, Mason & Lewis, LLP
90 Forest Avenue
Locust Valley, NY 11560
(516) 759-7517